

**New taxa and new records  
of the genus *Scopodes* Erichson from New Guinea.  
Supplement to the  
“Revision of the genus *Scopodes* Erichson from New Guinea”**

(Insecta, Coleoptera, Carabidae, Pentagonicinae)

By **Martin Baehr**

Baehr, M. (1995): New taxa and new records of the genus *Scopodes* Erichson from New Guinea. Supplement to the “Revision of the genus *Scopodes* Erichson from New Guinea” (Insecta, Coleoptera, Carabidae, Pentagonicinae). – Spixiana **18/2**: 111–121

Four new species and one new subspecies of *Scopodes* from New Guinea are described: *S. muliae*, spec. nov., *S. amplipennis*, spec. nov., both from central Irian Jaya, *S. perfoveatus*, spec. nov. from the Western Highlands in Papua New Guinea, *S. chimbu viridans*, subspec. nov. from the Eastern Highlands in Papua New Guinea, and *S. balkei* from central Irian Jaya. The first three species and the new subspecies belong to the *chimbu*-group of the New Guinean *Scopodes*, the last species is closely related to *S. violaceus* and *S. riedeli* which are both characterized by their minute elytral foveae. *S. amplipennis* and *S. perfoveatus* differ from all known species by the wide, posteriorly markedly widened elytra, the conspicuously sinuate apex of elytra, and the deeply impressed inner striae and basally markedly convex intervals. *S. perfoveatus* differs also by the presence of an additional setiferous puncture at the 4th interval close to the base of the elytra. The new subspecies of *S. chimbu* Darlington from central Papua New Guinea differs from the nominate form by its plain green colour.

New records of *S. altus* Darlington, *S. darlingtoni* Baehr, *S. atricornis* Baehr and *S. minor* Baehr are dealt with. *S. cheesmanni* Darlington is emended to *S. cheesmannae*.

Dr. M. Baehr, Zoologische Staatssammlung, Münchhausenstr. 21, D-81247 München, Germany.

### Introduction

Soon after having finished my “Revision of the genus *Scopodes* Erichson from New Guinea” I received a small sample of *Scopodes* from New Guinea from the Australian National Insect Collection, Canberra by courtesy of Mr. Tom Weir. Apart from some additional material of species mentioned in the revision, the sample contained a single female specimen of a conspicuous new species that could be included no more in the revision. Mr. A. Riedel who collected the bulk of the new species described in the revision, recently captured additional few *Scopodes* in Irian Jaya, two of them proved to represent a new species each. I received also another few *Scopodes* from the Naturhistorisches Museum, Wien, for determination that were recently collected by Mr. M. Balke in Irian Jaya, and from the Muséum d’Histoire naturelle, Genève that were collected in 1979 by Dr. W. G. Ullrich in Papua New Guinea. These samples include another new species and a new subspecies. The new taxa are now described separately in a supplement to my revision.

In the revision I had already expressed my opinion that the present knowledge of the New Guinean *Scopodes* is certainly very preliminary and that new species would be likely discovered in the near future. Hence these new taxa are perhaps only the beginning of a supplementary series of new species that will be discovered in future.

## Abbreviations of Collections mentioned in the text

ANIC	Australian National Insect Collection, Canberra
CBM	Collection M. Baehr, München
NHMW	Naturhistorisches Museum, Wien
MHNG	Muséum d'Histoire naturelle, Genève
ZSM-CBM	Collection M. Baehr, München (permanent loan from Zoologische Staatssammlung, München)

### The species

#### *Scopodes altus* Darlington

Darlington, 1968, p. 198; Baehr 1994, p. 104.

New records: 3♂♂, 2♀♀, Irian Jaya, Trikora-Gebiet, 19.-20.10.1993 Habbema-Kali Oue Tal, ca. 138°43'E, 04°13'S, 3450 m, leg. M. Balke (39)(NHMW); 2♂♂, Irian Jaya, Habbema-Gebiet, Paß zum Iebele-Tal, ca. 138°45'E, 04°07'S, 3300 m, leg. M. Balke (40)(NHMW).

Note. This high altitude inhabiting species is so far known only from a limited area around Lake Habbema in the Snow Mountains of central Irian Jaya.

#### *Scopodes darlingtoni* Baehr

Baehr, 1994, p. 122

New records: 2♂♂, 2♀♀, PNG/EHProv. Umg. Kainantu Onerunka, Papua Nille Guinée W. G. Ullrich, 22.IV., 18.VIII., 24.IX., 23.X.79 (CBM, MHNG); 1♂, PAPUA N GUINEA Onerunka II 80 nr Kainantu W. G. Ullrich (MHNG).

Note. This species is rather widely distributed in the central eastern part of Papua New Guinea.

#### *Scopodes* cf. *atricornis* Baehr

Baehr, 1994, p. 121

New record: 1♀, Irian Jaya, Jayawijaya-Pr. Holuwen, 1500 m, 30.VI.1994, leg. A. Riedel (CBM).

Note. The single specimen differs from a large series of *S. atricornis* by the generally green colour, the regular pronotal sulci, the regular frontal sulci, and the smooth frons and almost smooth clypeus. The specimen may thus likely represent a separate species or subspecies. Without knowledge of the male genitalia, however, I do not want to describe it formally as a separate taxon.

#### *Scopodes minor* Baehr

Baehr, 1994, p. 131

New record: 1♀, Irian Jaya, Jayawijaya-Pr. Holuwen, 1000 m, 30.VI.1994, leg. A. Riedel (CBM); 2♀♀, 9 II 80, XI 79, PNG/EHProv. Umg. Kainantu Onerunka, Papua Nille Guinée W. G. Ullrich (MHNG).

Note. This species was so far known from 4 specimens only and it is recorded as well from central Papua New Guinea as from central Irian Jaya.

*Scopodes chimbu viridans*, subspec. nov.

Fig. 9

Types. Holotype: ♂, 11 VI 79 PNG/EHProv. Umg. Kainantu Onerunka, Papua Nlle Guinée W. G. Ullrich (MHNG). – Paratypes: 5♀, same locality and collector, 8 X 79, 17 XI 79, XI 79, XII 79 (CBM, MHNG).

Diagnosis. Similar to nominate subspecies of *S. chimbu*, but elytra plain green, pronotum narrower with more acutely projecting lateral triangular process, and with denser, more regular transverse sulci.

Description

Measurements. Length: 3.5-3.7 mm; width: 1.50-1.60 mm. Ratios. Width head/pronotum: 1.17-1.20; width/length of pronotum: 1.24-1.26; width elytra/pronotum: 1.80-1.83; length/width of elytra: 1.32-1.33.

Colour. Elytra plain green, head and pronotum green with more or less extensive purplish areas. Otherwise colour similar to nominate subspecies.

Head. Similar to nominate subspecies.

Pronotum. Narrower than in nominate subspecies, lateral triangular process conspicuous, distinctly more projecting, transverse sulci in posterior part denser and more regular.

Elytra. Similar to nominate subspecies.

Lower surface. Similar to nominate subspecies.

♂ genitalia. Similar to nominate subspecies.

♀ genitalia. Similar to nominate subspecies.

Variation. Some variation noted in intensity of purplish colour on head and pronotum, and in relative width of pronotum.

Distribution (Fig. 9). Central eastern Papua New Guinea. Known only from type locality.

Habits. Largely unknown. Perhaps collected in median altitude.

Etymology. The name refers to the plain green colour of the elytra.

Relationships. This subspecies is in several respects similar to *S. chimbu* s. str., especially in the male genitalia. It is probably a local form, that is nevertheless easily recognized.

*Scopodes muliae*, spec. nov.

Figs 1, 5, 9

Types. Holotype: ♂, Irian Jaya, Mulia (n) to Dowone, 2200-2250 m, 8.VII.1994, leg. A. Riedel (ZSM-CBM).

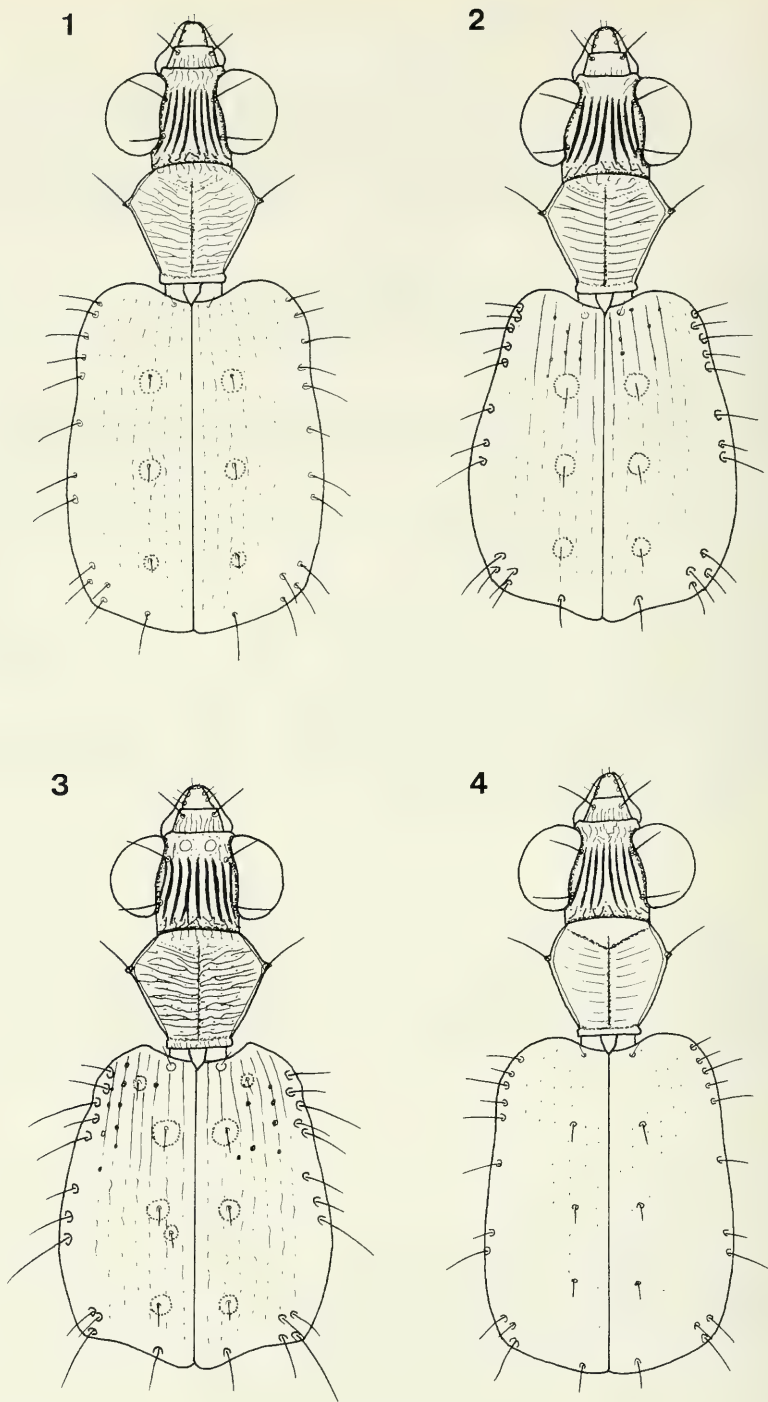
Diagnosis. Rather small and fairly narrow, greenish species with large, though not contrasting elytral foveae, rather superficial striation, and transverse, sericeous microreticulation of elytra. Further distinguished from related species by completely yellowish legs, short antenna, and rather regular transverse striae on pronotum.

Description

Measurements. Length: 3.6 mm; width: 1.45 mm. Ratios. Width head/pronotum: 1.21; width/length of pronotum: 1.24; width elytra/pronotum: 1.69; length/width of elytra: 1.38.

Colour. Greenish, head, pronotum, and elytra with faint golden and purplish lustre. Labrum and clypeus greenish. Antenna dark piceous, 1st-4th segments dirty yellow with piceous apices. Femora dirty yellow, metafemur and tibiae slightly darker, tarsi piceous.

Head. Eyes very large, space between inner border of eyes about as wide as diameter of eye. Labrum rather short and wide, gently triangular, anterior border fairly convex, 6-setose, in basal part medially impressed. Clypeus with shallow, transverse sulcus, basal part coarsely striate, rugose, rather glossy. Labrum, clypeus, and anterior part of frons with some very inconspicuous additional hairs. Anterior triangular field of frons heavily, irregularly wrinkled, moderately glossy. Frons between eyes with c. 8 deep, rather straight, fairly regular sulci that reach far posteriorly. Summit and neck coarsely wrinkled, impunctate. Whole upper surface of head moderately rugose, rather glossy. Antenna short, median segments c. 1.1-1.2 × as long as wide.



Figs 1-4. Habitus. 1. *Scopodes muliae*, spec. nov. 2. *S. amplipennis*, spec. nov. 3. *S. perfoveatus*, spec. nov. 4. *S. balkei*, spec. nov. Holotypes. Lengths: 3.6 mm; 3.5 mm; 3.45 mm; 3.85 mm.



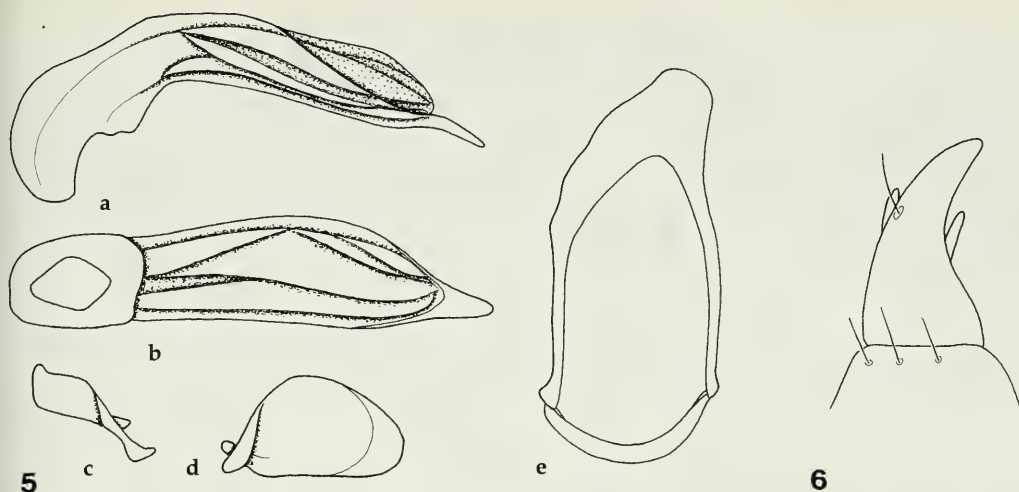


Fig. 5. *Scopodes muliae*, spec. nov. ♂ genitalia. a. Lateral view of aedeagus. b. Lower surface of aedeagus. c. Right paramere. d. Left paramere. e. Genital ring.

Fig. 6. *Scopodes amplipennis*, spec. nov. ♀ stylomere 2.

Pronotum. Convex, wide, rather trapezoidal, widest at lateral triangular process in anterior third. Lateral border line distinct. Margin anteriorly convex, posterior of triangular process very faintly convex, in front of posterior angles not concave. Lateral triangular process distinct, though small, triangular, laterally not much projecting. Posterior marginal seta absent. Anterior margin slightly convex, posterior margin straight. Median line distinct, fairly deep, not reaching apex nor base. In apical third with extremely shallow, wide, barely visible transverse sulcus. Whole upper surface with dense, coarse, in posterior part rather regular transverse sulci. Surface with sparse puncturation, without microreticulation, moderately rugose, rather glossy.

Elytra. Moderately elongate, fairly convex. Base comparatively wide, therefore elytra rather rectangular. Sides gently rounded, in anterior third rather deeply excised. Apex wide, apical border oblique, barely sinuate. Whole surface with fairly irregular, superficial striation. Foveae in third interval wide, though shallow, not contrasting. Surface fairly uneven. Microreticulation conspicuous, though rather superficial, consisting of very dense, transverse meshes that are remarkably irregular around the discal foveae. Surface with conspicuous, sericeous lustre. Pilosity very sparse and extremely short. Marginal pores comparatively small, rather inconspicuous. Wings elongate.

Lower surface. Metepisternum c.  $1.8 \times$  as long as wide. Sternites with sparse, short pilosity, with distinct microreticulation.

♂ genitalia. Genital ring somewhat deformed, asymmetric, large, fairly narrow. Apex fairly wide, rectangular, arms moderately wide. Aedeagus large, fairly curved, slightly asymmetric, lower surface gently convex, near apex sinuate, apex elongate, somewhat spoon-shaped. Orificium fairly elongate. Parameres large, as in fig. 5.

♀ genitalia. Unknown.

Variation. Unknown.

Distribution (Fig. 9). Central Irian Jaya. Known only from type locality.

Habits. Largely unknown. Collected in median altitude.

Etymology. The name refers to the type locality.

Relationships. With regard to the rather similar male genitalia this species is certainly closely related to *S. chimbu* Darlington. It differs, however, by the narrower elytra with less distinct striation, the plain green colour, and the yellowish colour of the legs.

*Scopodes amplipennis*, spec. nov.

Figs 2, 6, 9

Types. Holotype: ♀, Irian Jaya, s. Mulia, 1900-2200 m, 6-7.VII.1994, leg. A. Riedel (ZSM-CBM).

Diagnosis. Rather small, short and wide, bronzed-black species with greenish lustre, yellow legs, wide, posteriorly even markedly widened elytra, large, rather contrasting, blue elytral foveae, and irregularly structured surface of the elytra with the striae very deeply impressed near base. Further distinguished from related species by absence of an additional elytral pore at the basis of 5th stria, and rather regular transverse striae on pronotum.

Description

Measurements. Length: 3.5 mm; width: 1.5 mm. Ratios. Width head/pronotum: 1.25; width/length of pronotum: 1.23; width elytra/pronotum: 1.86; length/width of elytra: 1.19.

Colour. Bronzed-black, head with very faint, pronotum with rather distinct greenish and purplish lustre, elytra with distinct golden lustre. Labrum and clypeus black. Antenna yellow, becoming gradually darker towards apex. Legs yellow, tarsi piceous.

Head. Eyes very large, space between inner border of eyes slightly wider than diameter of eye. Labrum rather short and wide, gently triangular, anterior border fairly convex, 6-setose, in basal part medially impressed. Clypeus with shallow, transverse sulcus, basal part barely striate, smooth, glossy. Labrum, clypeus, and anterior part of frons with some very inconspicuous additional hairs. Anterior triangular field of frons not wrinkled, glossy. Frons between eyes with c. 6 deep, rather straight, regular sulci that reach far posteriorly. Summit and neck coarsely wrinkled, impunctate. Whole upper surface of head rather smooth, glossy. Antenna short, median segments c.  $1.1 \times$  as long as wide.

Pronotum. Convex, wide, rather trapezoidal, widest at lateral triangular process in anterior third. Lateral border line distinct. Margin anteriorly convex, posterior of triangular process almost straight, in front of posterior angles not concave. Lateral triangular process distinct, though small, triangular, laterally moderately projecting. Posterior marginal seta absent. Anterior margin slightly convex, posterior margin straight. Median line distinct, fairly deep, not reaching apex nor base. In apical third with extremely shallow, wide, barely visible transverse sulcus. Whole upper surface with dense, rather coarse, in posterior part regular transverse sulci. Surface almost without puncturation, without microreticulation, fairly smooth, rather glossy.

Elytra. Very short and wide, moderately convex. Base comparatively narrow, elytra markedly widened towards apex, widest in apical third. Sides strongly rounded, in anterior third somewhat excised. Apex rather wide, apical border oblique, slightly sinuate. Surface in basal fourth deeply striate, in posterior part striation superficial. Foveae in third interval wide, moderately deep, rather contrasting. Surface markedly uneven. Microreticulation conspicuous, though rather superficial, consisting of very dense, transverse meshes that are remarkably irregular around the discal foveae. Surface with conspicuous, sericeous lustre. Pilosity very sparse and short. Marginal pores comparatively large, contrasting. Wings short.

Lower surface. Metepisternum c.  $1.3 \times$  as long as wide. Sternites with extremely sparse and short pilosity, without distinct microreticulation.

♂ genitalia. Unknown.

♀ genitalia. Stylomere 2 medium-sized, rather curved, with dorsal ensiform and nematiform seta and with a single medium-sized ventral ensiform seta. Apex of stylomere 1 with 3-4 elongate hairs. Lateral plate densely setose.

Variation. Unknown.

Distribution (Fig. 9). Central Irian Jaya. Known only from type locality.

Habits. Largely unknown. Collected in median altitude.

Etymology. The name refers to the wide and short elytra.

Relationships. This species is perhaps rather closely related to the following *S. perfoveatus*, spec. nov. with which it shares the shape of the elytra, the deeply impressed striae in basal third, and the large, blue elytral foveae. A final decision, however, must await the discovery of the male genitalia in both species.

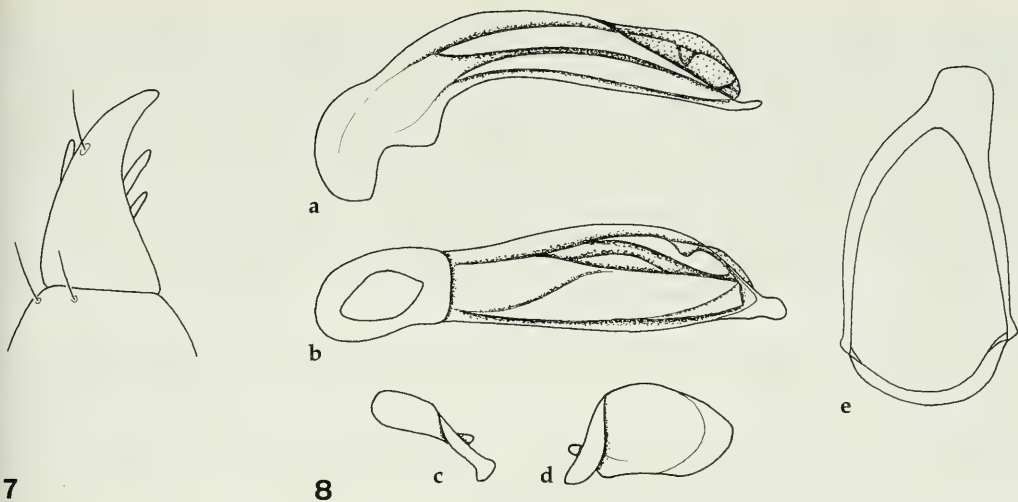


Fig. 7. *Scopodes perfoveatus*, spec. nov. ♀ stylomere 2.

Fig. 8. *Scopodes balkei*, spec. nov. ♂ genitalia. For legends see fig. 5.

*Scopodes perfoveatus*, spec. nov.

Figs 3, 7, 9

Types. Holotype: ♀, NEW GUINEA, Western Highlands, Kandep, 8000-8500 ft. 23.12.1961-14.2.1962, W. W. Brandt (ANIC).

Diagnosis. Rather small, very short and wide, cupreous species with yellow legs, wide, posteriorly markedly widened elytra, large, extremely contrasting, blue elytral foveae, presence of an additional fovea at the base of the 5th stria, and irregularly structured surface of the elytra with the striae very deeply impressed near base. Further distinguished from related species by the very irregular transverse strioles on pronotum and the markedly coarse microreticulation of elytra.

Description

Measurements. Length: 3.45 mm; width: 1.55 mm. Ratios. Width head/pronotum: 1.15; width/length of pronotum: 1.31; width elytra/pronotum: 1.81; length/width of elytra: 1.17.

Colour. Vividly cupreous. Labrum and clypeus blackish, clypeus with faint cupreous lustre. Antenna black, 1st-4th segments dirty yellow. Legs yellow, tarsi piceous.

Head. Eyes large, though space between inner border of eyes distinctly wider than diameter of eye. Labrum rather short and wide, gently triangular, anterior border fairly convex, 6-setose, in basal part medially impressed. Clypeus with shallow, transverse sulcus, basal part rather densely striate, smooth, rather glossy. Labrum, clypeus, and anterior part of frons with some very inconspicuous additional hairs. Anterior triangular field of frons barely wrinkled, though with two deep, circular foveae, rather glossy. Frons between eyes with c. 7-8 deep, rather straight, though somewhat irregular sulci that reach far posteriorly. Summit and neck very coarsely wrinkled, somewhat punctate. Whole upper surface of head rather rugose, fairly glossy. Antenna short, median segments c. 1.1 × as long as wide.

Pronotum. Convex, very wide, rather trapezoidal, widest at lateral triangular process in anterior third. Lateral border line distinct. Margin anteriorly convex, posterior of triangular process very faintly convex, in front of posterior angles not concave. Lateral triangular process distinct, though small, triangular, laterally not much projecting. Posterior marginal seta absent. Anterior margin slightly convex, posterior margin straight. Median line distinct, fairly deep, not reaching apex nor base. In apical third with extremely shallow, wide, barely visible transverse sulcus. Whole upper surface with dense, coarse, markedly irregular transverse sulci. Surface with sparse puncturation, without microreticulation, highly rugose, moderately glossy.



Elytra. Very short and wide, moderately convex. Base comparatively narrow, elytra markedly widened towards apex, widest in apical third. Sides strongly rounded, in anterior third faintly excised. Apex rather wide, apical border oblique, deeply sinuate. Surface in basal fourth very deeply striate, striae with irregular, deep punctures, in posterior part striation more superficial and very irregular. Foveae in third interval very wide, deep, very contrasting. An additional fovea present on both elytra near base of 5th stria, and unilaterally (left) an additional median fovea inside of 3rd stria present. Surface markedly uneven. Microreticulation very conspicuous, coarse, consisting of dense, transverse meshes that are remarkably irregular around the discal foveae. Surface with conspicuous, sericeous lustre. Pilosity very sparse and short. Marginal pores large, contrasting. Wings short.

Lower surface. Metepisternum c. 1.2-1.3 × as long as wide. Sternites with comparatively dense and short pilosity, with distinct microreticulation.

♂ genitalia. Unknown.

♀ genitalia. Stylomere 2 medium-sized, rather curved, with dorsal ensiform and nematiform seta, and with two rather elongate ventral ensiform setae. Apex of stylomere 1 with 2-3 elongate hairs. Lateral plate densely setose.

Variation. Unknown.

Distribution (Fig. 9). Western Highlands, central Papua New Guinea. Known only from type locality.

Habits. Unknown. Collected in fairly high altitude.

Etymology. The name refers to the very deep elytral foveae and to the additional fovea near base.

Relationships. This species is perhaps rather closely related to the foregoing *S. amplipennis*, spec. nov. with which it shares the shape of the elytra, the deeply impressed striae in basal third, and the large, blue elytral foveae. A final decision, however, must await the discovery of the male genitalia in both species. Certainly *S. perfoveatus*, spec. nov. is unique within all New Guinean *Scopodes* in the presence of the additional elytral fovea and this makes the relationships rather uncertain.

### Recognition of the new taxa of the *chimbu*-group

For recognition of the new species and subspecies of the *chimbu*-group the key in my revision (Baehr 1994) should be altered as following (Figs of the revision marked as **Ba94** fig.):

4. Foveae in 3rd interval more or less conspicuously blue; legs always uniformly yellow or light reddish ..... 5.
  - Foveae in 3rd interval not or but faintly blue; legs dark, or, more rarely, yellowish ..... 8.
5. Elytra very short and wide, ratio length/width <1.20, posteriorly remarkably widened (Figs 2, 3); elytral striae in basal third coarse and deep, posteriorly shallow and inconspicuous ..... 5a.
  - Elytra longer and less wide, ratio length/width >1.30, posteriorly barely widened, elytral striae in basal third fine and rather shallow as in posterior part ..... 5b.
- 5a. Colour cupreous; transverse striae of pronotum very coarse and irregular; apex of elytra deeply excised; besides the foveae at 3rd stria a setiferous fovea present in basal fourth of 5th stria (Fig. 3); microreticulation of elytra very distinct. Central Papua New Guinea ..... *perfoveatus*, spec. nov.
  - Colour blackish-bronzed with greenish and purplish tinge; transverse striae of pronotum less coarse, rather regular; apex of elytra moderately excised; no additional setiferous fovea present in basal fourth of 5th stria (Fig. 2); microreticulation of elytra superficial. Central Irian Jaya ..... *amplipennis*, spec. nov.
- 5b. Smaller species (c. 3.5 mm); colour bronzed or somewhat greenish; antenna almost completely reddish, short, median segments c. as wide as long; frontal sulci fewer, c. 6; aedeagus with simple apex (**Ba94** fig. 9). Eastern central Papua New Guinea ..... *tafa* Darlington
  - Larger species (>4 mm); colour either bright green, or bronzed without any green reflections, or cupreous, or pronotum and head green, elytra cupreous; antenna with 4 basal segments yellow, rest more or less contrastingly dark, longer, median segments distinctly longer than wide; frontal sulci more numerous, 8-9; aedeagus either with knob-like apex or simple, in latter case either colour bright green or microreticulation of elytra almost isodiametric. .... 6.





9

Fig. 9. Distribution. *Scopodes chimbu viridans*, subspec. nov.: ■; *S. muliae*, spec. nov.: ●; *S. amplipennis*, spec. nov.: ▼; *S. perfoveatus*, spec. nov.: ◆; *S. balkei*, spec. nov.: ▲.

and

8. Femora yellow or light reddish ..... 8a.  
 – Femora dark ..... 9.
- 8a. Large, wide species with cupreous elytral suture; aedeagus with wide, spatulate, laterally hooked apex (Ba94 fig. 8). Central eastern Papua New Guinea ..... *wei* Bell & Bell  
 – Smaller, narrower, uniformly greenish species without cupreous elytral suture; aedeagus with narrow, elongate, tapering apex (Fig. 5). Central Irian Jaya ..... *muliae*, spec. nov.
9. Smaller species, length <3.7 mm; antenna short, median antennomeres almost as wide as long; aedeagus (when known) without knob-like apex and without sharp lateral edge (BA94 fig. 3)10.  
 – Larger species, length >4.0 mm; antenna longer, median antennomeres >1.3 × as long as wide; aedeagus with knob-like apex and/or with sharp lateral edge (BA94 figs 4, 6, 7) ..... 11.
10. Colour green ..... 10a.  
 – Colour blackish-bronzed, forebody with some greenish tinge; ♂ genitalia see Ba94 fig. 3. Central Papua New Guinea ..... *chimbu chimbu* Darlington
- 10a. Clypeus and labrum contrastingly blackish-aeuous; frontal sulci parallel, markedly regular; antenna reddish throughout, only terminal segments slightly darkened; striation of elytra almost absent except near base; ♂ genitalia unknown. Eastern central Papua New Guinea ..... *regularis* Baehr  
 – Clypeus and labrum greenish, not contrasting; frontal sulci less parallel, slightly irregular; antenna from 5th antennomere contrastingly black; striation of elytra distinct throughout; ♂ genitalia as in *c. chimbu* Darlington (Ba94 fig. 3). Eastern central Papua New Guinea ..... *chimbu viridans*, subspec. nov.
11. Colour plain green, only labrum blackish-green; elytra slightly shorter, ratio l/w 1.36; apex of aedeagus slightly knob-like, but without sharp lateral edge (BA94 fig. 4). Northeastern Papua New Guinea ..... *virescens* Baehr  
 – Colour cupreous, or blackish with dark greenish, bluish, or cupreous tinge; elytra more elongate, ratio l/w >1.4; lower surface of aedeagus laterally with sharp edge, apex more or less widened (BA94 figs 6, 7) ..... 12.

## *Scopodes cheesmannae* Darlington

*Scopodes cheesmanni* Darlington, 1968, p. 201; Baehr 1994, p. 129.

Note. Emendation of gender, because the species was named after Miss L. Evelyn Cheesman.

### *Scopodes balkei*, spec. nov.

Figs 4, 8, 9

Types. Holotype: ♂, Irian Jaya, 23.9.1993 Tanime Gebiet, Tanime, 1500 m, ca. 140°06'E 04°27'S, leg. M. Balke (18)(NHMW).

Diagnosis. Small species with greenish forebody and black elytra, dark legs, very small, not contrasting elytral foveae, superficial elytral striation, and superficial microreticulation. Further distinguished from related species by contrasting colour of fore body and elytra, little deformed male genital ring with square apex, and aedeagus with slightly knob-shaped apex and markedly striolate lower surface.

#### Description

Measurements. Length: 3.85 mm; width: 1.5 mm. Ratios. Width head/pronotum: 1.25; width/length of pronotum: 1.14; width elytra/pronotum: 1.82; length/width of elytra: 1.39.

Colour. Head and prothorax dark green with some cupreous lustre median of eyes; elytra black with faint golden hue. Labrum black, clypeus and anterior part of frons black with some cupreous tinge. Antenna reddish throughout. Legs black, tibiae slightly lighter.

Head. Eyes very large, space between inner border of eyes about as wide as diameter of eye. Labrum elongate, triangular, anterior border very convex, 6-setose, in basal part medially impressed. Clypeus with shallow, transverse sulcus, basal part slightly striate, glossy. Labrum, clypeus, and anterior part of frons with some very inconspicuous additional hairs. Anterior triangular field of frons slightly wrinkled and punctate, rather glossy. Frons between eyes with c. 8 deep, rather regular sulci that reach far posteriorly. Summit and neck slightly wrinkled, apparently impunctate. Whole upper surface of head glossy. Antenna moderately elongate, median segments c. 1.3 × as long as wide.

Pronotum. Convex, rather wide, cordiform, widest at lateral triangular process in anterior third. Lateral border line distinct. Margin rather evenly rounded throughout, in front of posterior angles barely concave, hence, whole pronotum has a rather rounded appearance. Lateral triangular process distinct, though very small, obtusely triangular. Posterior marginal seta absent. Anterior margin slightly convex, posterior margin straight. Median line distinct, fairly deep, not reaching apex nor base. In apical third with distinct, though rather shallow, moderately wide, transverse sulcus. Upper surface posteriorly of sulcus with rather few, superficial, transverse sulci, apparently without puncturation, without microreticulation. Surface highly glossy.

Elytra. Moderately elongate, highly convex. Base comparatively wide, therefore elytra rather rectangular. Sides gently rounded, in anterior third slightly sinuate. Apex wide, apical border oblique and faintly sinuate. Striation barely indicated by very superficial rows of fine punctures. Foveae in third interval small, very inconspicuous, not contrasting. Surface with faint traces of microreticulation, glossy. Pilosity very sparse and extremely short, barely visible. Marginal pores rather large and conspicuous. Wings moderately elongate.

Lower surface. Metepisternum c. 1.5 × as long as wide. Sternites with extremely sparse and short pilosity, with dense and distinct microreticulation.

♂ genitalia. Genital ring fairly deformed, moderately asymmetric, moderately wide. Apex rather wide, apically rounded, arms fairly slender. Aedeagus large, moderately curved, slightly asymmetric, lower surface straight, distinctly striolate, apex slightly knob-shaped, moderately wide. Orificium rather short. Parameres medium-sized, as in fig. 8.

♀ genitalia. Unknown.

Variation. Unknown.

Distribution (Fig. 9). Central eastern Irian Jaya. Known only from type locality.

Habits. Unknown. Collected in median altitude.

Etymology. The name is a patronym in honour of the collector.

Relationships. This species is certainly closely related to *S. violaceus* Baehr and *S. riedeli* Baehr, though differs from both by colour and by shape of the apex of the aedeagus. By virtue of similar structure of pronotum and rather similar aedeagus it is perhaps more closely related to the eastern *S. violaceus*.

### Recognition

For recognition of *S. balkei*, spec. nov. the key in my revision (Baehr 1994) should be altered as following:

- 14. Foveae in 3rd interval small, barely visible; ♂ genitalia see **BA94** figs. 26, 27; fig. 8. .... 15.
  - Foveae in 3rd interval always large and conspicuous; ♂ genitalia, when known, see **BA94** figs 13-15, 17-23, 25 ..... 16.
- 15. Colour violaceous; apex of aedeagus not knob-like (**Ba94** figs 26, 27) ..... 15a.
  - Colour not violaceous, forebody greenish, elytra black with golden tinge; aedeagus ventrally striolate, apex slightly knob-like (Fig. 8). Central eastern Irian Jaya ..... *balkei*, spec. nov.
- 15a. Foveae in 3rd interval usually smaller, barely visible; elytra almost non-striate; apex of aedeagus not lancet-shaped (Fig. 26); ♀ sternum VII without distinct notch in middle of apical margin. Central Irian Jaya ..... *violaceus*, spec. nov.
  - Foveae in 3rd interval usually larger, well visible; elytra usually feebly striate; apex of aedeagus lancet-shaped (Fig. 27); ♀ sternum VII with distinct notch in middle of apical margin. Vogelkop, western Irian Jaya ..... *riedeli*, spec. nov.

### Acknowledgements

My best thanks are due to Dr. I. Löbl, Genève, Mr. A. Riedel, München, Dr. H. Schönmann, Wien, and Mr. T. Weir, Canberra, for kindly submitting the specimens for examination.

### Literature

Baehr, M. 1994. Revision of the genus *Scopodes* Erichson from New Guinea (Insecta, Coleoptera, Carabidae, Pentagonicinae). – *Spixiana* **17**: 97-155  
Darlington, P. J. Jr. 1968. The Carabid Beetles of New Guinea. Part III. Harpalinae (Continued): Perigonini to Pseudomorphini. – *Bull. Mus. comp. Zool.* **137**: 1-253